Comments on Potential Changes to Energy Star Criteria for Residential Clothes Washers

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The California Urban Water Conservation Council is a non-profit organization comprised of 319 water utility agencies, environmental advocacy groups, and other organizations – all pledged to implementing 14 Best Management Practices for water efficiency in California. One of these Best Management Practices (BMP 6, attached) requires that water utility agencies provide financial incentives for high-efficiency clothes washers. This financial incentive requirement has been a Best Management Practice since 1997. As a result, California has had considerable experience in the issues associated with attracting consumers to these appliances.

Because the Energy Star criteria for high-efficiency clothes washers currently do not include a specific water factor, there has been confusion among consumers and water utilities alike. A presumption of water efficiency has generally been made by the consumer when purchasing an Energy Star-labeled clothes washer, and in California with financial incentives now tied to the water factor, there have been unhappy consumers who purchased Energy Star washers who could not qualify for rebates from their local water utility for their clothes washer because it had a high water factor rating.

Further compounding the issue is the set of standards adopted in 2004 by the California Energy Commission, requiring that residential clothes washers sold in California meet a water factor standard of 8.5 by 2007 and a water factor standard of 6.0 by 2010. A pre-emption waiver application is being prepared by the Energy Commission for submission to the Department of Energy. In the meantime, water utility agencies in California are gearing their financial incentives to promote washers that are even more efficient than the standards (see BMP 6, attached).

Energy Star, as the premier product label in the United States today, needs to reflect the changes happening in California and elsewhere and incentivize properly the water efficiency side of these products. Consequently, the California Urban Water Conservation Council was delighted to see a proposed discussion of this issue on August 31, 2004 in Washington, DC, and we would like to express our firm support for a water factor of 7.5 being required by Energy Star. A water factor requirement at this level would dovetail nicely with the California Energy Commission standard taking effect in 2007; it would send the message to millions of California consumers that Energy Star washers are even better.

We also recognize that the U.S. Environmental Protection Agency is exploring water appliance labeling opportunities at this time. Our support expressed herein is not meant to convey that we would not also support a water label, even if a separate label. Because of Energy Star's remarkable consumer recognition, adding a water factor requirement to Energy Star would be an improvement, would greatly alleviate the current market confusion on high-efficiency washers, and should be pursued independently of an EPA effort on a water labeling program.

If the Council can provide you with any needed information regarding water factor standards or clothes washer financial incentives in California, please let us know. We are happy to assist in this important Energy Star effort.

Sincerely yours,

Mary Ann Dickinson
Executive Director

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cc: Council Steering Committee
Steering Committee on Water Efficient Labeling
John Flowers, USEPA
Rebecca Foster, CEE

6. HIGH-EFFICIENCY CLOTHES WASHING MACHINE FINANCIAL INCENTIVE PROGRAMS (Revised March 10, 2004)

A. Implementation

Implementation shall consist of at least the following actions:

1. Until January 1, 2007, the water agency shall offer a financial incentive, if cost effective, for the purchase of high-efficiency clothes washing machines (HEWS) meeting a water factor value of 9.5 or less.

2. Any financial incentive offered shall be not less than the marginal benefits of the water savings, reduced by the necessary expense of administering the incentive program. Incentive levels shall be calculated by using methods found in *A Guide to Customer Incentives for Water Conservation* prepared by Barakat and Chamberlain for the CUWA, CUWCC, and US EPA, February 1994. A water agency is not required to implement a financial incentive program if the maximum cost-effective financial incentive is less than $50.

CUWCC shall begin to review this BMP before July 1, 2005. This review shall determine appropriate agency implementation activities after 2007. The purpose of this review is to revise this BMP to account for potential Federal and State standards, the market share of HEWs with various water factors, further advances in washer efficiency, funding partner activities, and consumer participation.

B. Implementation Schedule

1. For Agencies signing the MOU prior to July 1, 2003, implementation shall commence no later than July 1, 2004.

2. 2. For Agencies signing the MOU or becoming subject to the MOU after July 1, 2003, implementation shall commence no later than July 1 of the second year following the year the agency signed or became subject to the MOU.

C. Coverage Requirements

Overview

The objective of the Council is to transform the clothes washer market by increasing sales of HEWs. The Council anticipates this interim program will have a positive and long-lasting effect on the market share of HEWs; thus decreasing the future efforts needed by the Council and its members to achieve water efficiency in this sector.

The goal for this BMP is to at least triple the market share of HEWs purchased for use inside residential dwelling units, where no incentive program exists. For purposes of determining coverage requirements, the Council's estimates a non-incentive market share of HEWs at 12% of all clothes washing machine sales (derived from year 2000 Energy Star data). The coverage requirements are based upon the goal of increasing the market share of HEWs to thirty-six percent (36%) of all clothes washing machine sales.

Coverage Goal

The Council developed a Coverage Goal (CG) system to more easily determine coverage progress, and allow agencies to obtain additional credit for promoting the purchase of ultra high efficiency machines with water factor values of 8.5 or less. The CG is based on the total quantity of dwelling units (single-family and multi-family) in each agency's service territory. The Council chose to use the quantity of both single-family and multi-family dwelling units because US Census data on in-home clothes washing machines includes both types of dwelling units.

Agency determines its CG by the following calculation:

CG = Total Dwelling Units x 80% x 6.67% x 12% x 3 x 2.5

Where:

CG = Coverage Goal
Dwelling Units = total SF and MF dwelling units in agency service territory
80% = percentage of all dwelling units with in-home clothes washers
6.67% = percentage of washers requiring replacement each year
12% = Average HEW market share when no incentives exist
3 = tripling non-incentive market share
2.5 = years of program activity from July-2004 to January-2007

Simplified Formula: CG = Total Dwelling Units x 0.048

Agencies may request an adjusted CG where US Census data or other statistically valid surveys prove that less than 80% of all dwelling units (single-family and multi-family) in their service territory include a clothes washing machine. Agencies signing the MOU after July 1, 2003, shall use a prorated CG based on implementation period of less than 2.5 years.

Coverage Points

Agency shall earn points towards its Coverage Goal for the purchase and installation of HEWs in its service territory where agency provides a financial incentive of $25 or more per HEW. In efforts to transform the market place towards ultra-high efficiency washers, agency may earn additional points for HEWs with water factor values of 8.5 or less.

1. Agency shall earn 1 point for each HEW incentive issued on or after July 1, 2004, which results in the purchase and installation of a HEW with a water factor value greater than 8.5 but not exceeding 9.5.

2. Agency shall earn 2 points for each HEW incentive issued on or after July 1, 2004 resulting in the purchase and installation of a HEW with a water factor value greater than 6.0 but not exceeding 8.5.

3. Agency shall earn 3 points for each HEW incentive issued on or after July 1, 2004 resulting in the purchase and installation of a HEW with a water factor value of 6.0 or less.

Past Credit Points

Agency shall have the option to receive points towards its Coverage Goal for past efforts (efforts prior to July 1, 2004) by one of the following methods of agency's choosing:

1. Agencies shall earn points according to point scale described above in "Coverage Points; 1, 2 and 3" for each HEW incentive issued before July 1, 2004, resulting from agency incentive program, where agency has documentation of participation. Agency shall not receive any credit for HEWs with water factors greater than 9.5. Agencies shall not receive credit for any HEW sales or installations where the agency did not materially and substantially participate in the incentive program, and agency did not provide a financial incentive of $25 or more.

   OR

2. Agencies shall earn 1 point for each HEW incentive issued before July 1, 2004, resulting from agency incentive program, where agency has documentation of participation. Agencies shall not receive credit for any HEW sales or installations

where the agency did not materially and substantially participate in the incentive program, and agency did not provide a financial incentive of $25 or more.

D. Requirements for Documenting BMP Implementation

1. Agency shall provide documentation for all of the following items:

   1.1 The quantity of single-family and multi-family dwelling units in the agency service area and the calculated Coverage Goal.
   1.2 The quantity and value of financial incentives issued for HEWs with water factor values greater than 8.5, but not exceeding 9.5.
   1.3 The quantity and value of financial incentives issued HEWs with water factor values greater than 6.0 but not exceeding 8.5.
   1.4 The quantity and value of financial incentives issued for HEWs with water factors of 6.0 or less.
   1.5 Average or estimated administration and overhead costs to operate the program.
   1.6 To receive credit for past programs, agency shall provide: quantity and value of financial incentives, water factor values and date of incentives issued for high-efficiency clothes washers installed before July 1, 2004.

2. Agency shall retain records of each participant of the incentive program, including: name, address and telephone number of participant; water account number of building or dwelling unit; make and model of HEW purchased; water factor value; dollar amount of the agency's financial incentive; dollar amount of program partner's financial incentive (if applicable); and name of program partner(s).

E. Criteria to Determine BMP Implementation Status

Agency is offering a financial incentive to customers in its service territory for the purchase of high-efficiency clothes washing machines with water factors of 9.5 or less, and agency is meeting the coverage requirement as stated in this BMP.

Agency shall be considered on-track to meet its coverage requirements according to the following table:

Implementation Status Schedule	
Date	Percent of Points Earned Towards Coverage Goal
January 1, 2005	10%
July 1, 2005	30%
January 1, 2006	50%
July 1, 2006	75%
January 1, 2007	100%

Agencies signing the MOU after July 1, 2003, shall have a prorated Implementation Status Schedule, based on implementation period of less than 2.5 years.

F. Water Savings Assumptions

Gross water savings (gallons) from financial incentive programs that result in the purchase and installation of High Efficiency Washing Machines with water factors equal to or less than 9.5 shall be calculated using the following formula:

$$GWS = 14\ \text{yr.} \times \sum_i N_i \times (13.3 - i) \times 1{,}170\ \frac{\text{gal.}}{\text{yr.}}$$

Where:

N_i is the number of machines replaced with water factor i
(i < 9.5)
13.3 is the Baseline WF for washers sold in 1994, as supplied to DOE by the Association of Home Appliance Manufacturers (AHAM).
14 yr. is the assumed average useful life of residential washers. (Based on information from the Bern Kansas study)
1,170 gallons/year is the average change in water use for a unit change in water factor. This value was developed by the California Energy Commission.

Net water savings (gallons) from financial incentive programs shall be calculated using the following formula:

$$NWS = GWS \times (1 - FR),$$

Where:

FR is the estimated rate of free ridership for the BMP 6 financial incentive program.